

Remarks

In response to the Office Action mailed on August 22, 2008, the Applicant respectfully requests reconsideration in view of the following remarks. In the present application, claims 1, 28, 29, and 33 have been amended. The claims have been amended for clarification. Support for the amended claims may be found on at least page 12, lines 5-22 in the Specification. No new matter has been added.

Claims 1-47 are pending in the application. Claims 1-7, 9-17, 20-24, 27-28, and 30-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li (US 2004/0054804) in view of Edwards (US 6,873,619) and further in view of Olafsson (US 6,785,371). Claims 8, 18, and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Edwards, Olafsson and Hanson et al. (US 7,136,645, hereinafter “Hanson”). Claims 19 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Edwards, Olafsson, Blount et al. (US 6,070,184) and further in view of Hanson. Claims 33-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Edwards, Blount, Hanson and Olafsson. Claims 25-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Edwards, Olafsson and Blount.

Claim Rejections - 35 U.S.C. §103

1-7, 9-17, 20-24, 27-28, and 30-31

Claims 1-7, 9-17, 20-24, 27-28, and 30-31 are rejected as being unpatentable over Li in view of Edwards and Olafsson. The rejection of these claims is respectfully traversed.

Amended independent claim 1 specifies a method of monitoring and providing online connectivity sources. The method includes monitoring a connectivity status of one or more connectivity sources, the one or more connectivity sources comprising at least a first connectivity source and a second connectivity source; selecting one of one or more available connectivity sources for use for online communications; connecting a user's computer to a remote computing system via the selected available connectivity source; monitoring whether the connection to the remote computing system via the selected connectivity source has failed; if the connection is detected as failed, then scheduling a poll on a background software thread; if the poll fails, then generating a notification that the connection to the remote computing system via the selected connectivity source is disconnected, wherein the selected connectivity source comprises the first connectivity source; attempting reconnection to the remote computing system; if the selected connectivity source is lost, determining whether the second connectivity source is available; if the second connectivity source is available, automatically connecting the user's computer to the remote computing system via the second connectivity source without user action; reducing an interval at which reconnection to the remote computing system is allowed from a first interval to a second interval after not being able to connect to the remote computing system using the first connectivity source for a given time period so that a connection attempt may be made to the remote computing system via the second connectivity source after the reduced interval; resetting the time period upon detecting a network change, the network change comprising a hardware change at the user's computer; switching back to the first interval upon detecting the network change; and marking the one or more connectivity sources as inoperable while the user's

computer is shutting down to prevent subsequent online communication events from adding to shutdown delays.

It is respectfully submitted that the combination of Li, Edwards and Olafsson fails to teach, disclose, or suggest each and every feature specified in amended claim 1. For example, the aforementioned combination fails to disclose resetting the time period upon detecting a network change, the network change comprising a hardware change at the user's computer or marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays.

Li discusses failure recovery for a high-speed modem that is connected through a router to various connected Internet appliances. The failure recovery is accomplished by using one of the Internet appliances as a gateway with a dial-up connection and directing all the other Internet appliances to the gateway so that when the high-speed modem fails, Internet access is provided by a single dial-up connection on the gateway that is shared by all the Internet appliances connected to the router. See paragraphs 0017-0018.

Li however, in contrast to amended claim 1, and as conceded in the Office Action (see page 5), fails to disclose resetting the time period or marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays. In particular, Li discusses that the high-speed modem connection is reactivated when a high-speed service reactivation is received. See paragraph 0043. Thus, Li bases reactivation on whether or not a reactivation communication is received and not on an interval or time period. Furthermore, while Li discusses deactivating the shared dial-up connection when

the high speed service reactivation is received (see paragraph 0043), Li fails to disclose marking a connectivity source as inoperable during a computer shutdown to prevent subsequent online communication events from adding to shutdown delays, as specified in amended claim 1. In particular, Li appears to be silent with respect to changing the status of connectivity sources during a computer shutdown.

Edwards fails to cure Li's deficiencies. Edwards discusses finding a network segment path for a communication on a communication network based on obtained link layer information. See Col. 2, lines 18-27. Edwards further discusses the scheduled round robin polling of devices to passively identify failures. See Col. 12, lines 15-18.

Edwards however, in contrast to amended claim 1, and as conceded in the Office Action (see page 5), fails to disclose resetting the time period or marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays. As discussed above, Edwards is merely concerned with finding network segment paths for communication on a communication network and the polling of devices to passively identify failures. Thus, Edwards is silent with respect to a time period or interval for reconnecting to a remote computing system. Edwards is also silent with respect to changing the status of connectivity sources during a computer shutdown.

Olafsson fails to cure the deficiencies of Li and Edwards. Olafsson discusses reducing the initialization time associated with reconnects to a modem communications over a telephone line after a line corrupting event or a channel interruption (e.g., call waiting or caller identification). A modem system may be configured to utilize stored analog and digital impairment information, equalizer settings, constellations, and the like

to immediately reset the modem system parameters if the channel connection is interrupted by a call waiting procedure, off-hook condition at an extension telephone, caller identification request, or a channel corruption event (planned or unplanned). For example, in response to a call waiting scenario, a client modem may signal a server to enter a standby mode. A server modem can then switch into an FSK mode to detect caller identification information while the server idles. If a user answers the second call, the client modem may periodically transmit standby or heartbeat tones to the server to continue holding. When the second call ends, the client modem would commence a quick reconnect handshaking protocol so that the modem may be reconnected in a matter of seconds. Thus, long reconnects due to incoming call waiting or caller identification signals on a telephone line are avoided. See Col. 18, line 25 through Col. 19, line 10.

Olafsson however, in contrast to amended claim 1, fails to disclose resetting the time period or marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays. As discussed above, Olafsson discusses reducing initialization times associated with modem reconnects over a telephone line by commencing a quick reconnect handshaking protocol. Olafsson further discusses switching to the protocol (to reduce time) after a user of the telephone line decides to accept an incoming call waiting or caller identification signal which puts a server in a standby mode. Olafsson however, fails to disclose resetting the time period upon detecting a network change, the network change comprising a hardware change at the user's computer. In fact, Olafsson appears to be silent regarding specifically disclosing resetting the reconnect time period enabled by the quick reconnect procedure to a

different reconnect period and also appears to be silent regarding resetting the aforementioned time period in response to a hardware change at a user's computer. For example, as discussed above, Olafsson only discusses that a modem system may be configured to utilize stored analog and digital impairment information, equalizer settings, constellations, and the like to immediately reset modem system parameters if the channel connection is interrupted. None of the aforementioned settings appear to comprise a hardware change at a user computer. Olafsson also fails to disclose marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays. In the Office Action, col. 18, line 65 to col. 19, line 5 of Olafsson is relied on for allegedly disclosing this feature. However, the aforementioned section of Olafsson, which discusses the quick reconnect handshake, does not appear to discuss activity occurring during the shutdown of a computer or the specific marking of one or more connectivity sources as inoperable.

Based on the foregoing, amended claim 1 is allowable and the rejection of this claim should be withdrawn. Claims 7, 9-10, 12-17, 20-24, and 27 depend from amended claim 1, and are thus allowable for at least the same reasons. Amended claim 28 specifies similar features as amended claim 1 and is also allowable over the combination of Li and Edwards for at least the same reasons discussed with respect to claim 1. Claim 31 depends from amended claim 28 and thus is allowable for at least the same reasons. Therefore, the rejection of claims 7, 9-10-12-17, 20-24, 27-28, and 31 should also be withdrawn.

Claims 8, 18, and 29

Claims 8, 18, and 29 are rejected as being unpatentable over Li in view of Edwards, Olafsson and Hanson. The rejection of these claims is respectfully traversed.

It is respectfully submitted that the combination of Li, Edwards, Olafsson, and Hanson fails to each, disclose, or suggest each of the features specified in claims 8, 18, and 29. Claims 8 and 18 depend from amended claim 1 and thus specify at least the same features. Therefore these claims are allowable over the combination of Li, Edwards, and Olafsson for at least the same reasons discussed above with respect to amended claim 1. Claim 29 depends from amended claim 28 which specifies similar features as amended claim 1. Therefore, claim 29 is also allowable over the combination of Li, Edwards, and Olafsson for at least the same reasons discussed above with respect to amended claim 1.

Hanson, relied upon in the Office Action for allegedly curing the deficiencies of the Li, Edwards, and Olafsson, discusses enabling existing network applications to run reliably in mobile environments. A Mobility Management Server coupled to a mobile network maintains the state of each of any number of Mobile End Systems and handles complex session management required to maintain persistent connections to the network and to other peer processes. See Abstract. Hanson further discusses a protocol which the Mobility Management Server utilizes to stop retransmitting frames for a particular connection if it receives no notification from a corresponding Mobile End System. When this occurs, the Mobility Management Server assumes that the Mobile End System is in some unreachable state and places the connection in a dormant state. See Col. 30, lines 22-34.

Hanson however, fails to teach, disclose or suggest resetting the time period or marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays. In contrast, Hanson merely discusses placing a connection in a dormant state once a server stops retransmitting frames for that connection.

Based on the foregoing, amended claims 8, 18, and 29 are allowable and the rejection of these claims should be withdrawn.

Claims 19 and 32

Claims 19 and 32 are rejected as being unpatentable over Li in view of Edwards, Olafsson, Blount, and Hanson. The rejection of these claims is respectfully traversed.

It is respectfully submitted that the combination of Li, Edwards, Olafsson, Blount, and Hanson fails to teach, disclose, or suggest each of the features specified in claims 19 and 32. Claim 19 depends from amended claim 1 and claim 32 depends from amended claim 28. Therefore, these claims are allowable over the combination of Li, Edwards, Olafsson, and Hanson for at least the same reasons as amended claims 1 and 28.

Blount, relied upon in the Office Action for allegedly curing the deficiencies of Li Edwards, Olafsson, and Hanson, discusses communicating with a web browser executing on a remote/mobile processing system which is temporarily and intermittently connected to a second computer by storing in a persistent request queue at the second computer, a request from the web browser to a server application accessible to the second computer. An interim response is provided to the web browser in response to the request from the client application. The stored request is provided to the server application and a response is received from the server application. The received response may then be provided to

the web browser executing on the remote/mobile processing system. See Col. 3, lines 30-44.

Blount however, fails to teach, disclose or suggest resetting the time period or marking the one or more connectivity sources as inoperable while the user's computer is shutting down to prevent subsequent online communication events from adding to shutdown delays. In contrast, Blount is not concerned with time periods or reconnection but rather web browser communications while a communication is established between two computers.

Based on the foregoing, amended claims 19 and 32 are allowable and the rejection of these claims should be withdrawn.

Claims 33-47

Claims 33-47 are rejected as being unpatentable over Li in view of Edwards, Blount, Hanson, and Olafsson. The rejection of these claims is respectfully traversed.

Amended independent claim 33 specifies similar features as amended independent claim 28 and is thus allowable over the combination of Li, Edwards, Blount, Hanson, and Olafsson for at least the same reasons discussed above with respect to amended claim 28. Claims 34-47 depend from amended claim 33 and are thus also allowable over the aforementioned combination for at least the same reasons. Therefore, the rejection of claims 33-47 should be withdrawn.

Claims 25-26

Claims 25-26 are rejected as being unpatentable over Li in view of Edwards, Olafsson, and Blount. The rejection of these claims is respectfully traversed.

It is respectfully submitted that the combination of Li, Edwards, Olafsson, and Blount fails to teach, disclose, or suggest each of the features specified in claims 25-26. Claims 25-26 depend from amended claim 1 and thus recite at least the same features. As discussed above with respect to the discussion of claims 19 and 32-47, the features specified in amended claim 1 are allowable over the combination of Li, Edwards, Olafsson, and Blount. Therefore, claims 25-26 which recite at least these same features are also allowable over the aforementioned combination and thus, the rejection of these claims should be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, this application is now in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is invited to call the Applicant's attorney at the number listed below.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.

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